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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 09/851,248 | 05/09/2001 | Shinji Ebata | Q64412 | 2998 |
| 7590 | 12/30/2004 | | EXAMINER | |
| SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037 | | | RUHL, DENNIS WILLIAM | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3629 | |

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/851,248 | EBATA, SHINJI |
| | Examiner | Art Unit |
| | Dennis Ruhl | 3629 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 November 2004.
2a) This action is **FINAL**. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-84 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-84 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/19/03.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

The examiner will address applicant's remarks/arguments at the end of this office action.

1. Claims 18,27,34,48,63,83 are objected to because of the following informalities: These claims need to have the preambles amended. Claim 18, is a dependent claim that depends to claim 4, so the term "A" should be "the". Applicant changed all other dependent claims that depend to claim 1 to read "The" instead of "A". The same applies to claim 27. In claim 34, the language "configured to administers" needs to be changed to "configured to administer" (take out the "s" in administers). For claims 48,63,83, these claims are independent claims so "The" in the preamble should be changed to "A". Independent claims do not begin by stating "The ..." which implies they are dependent claims. Applicant should review all claims to make sure the preambles are correct. Appropriate correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8,18,19,22,23,26,27,30,32,34,36,38-47,59-78, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerantz (6122591) in view of Smith et al. (6430496).

Applicant should take notice that with respect to the pending article claims that contain limitations directed to method steps defining how the method of the invention works, these limitations have received patentable weight to the extent that the prior art must be capable of doing what is claimed.

For claims 1-4,18,22,34,36,38,39,41,42,59,63,75-78, Pomerantz discloses providing a transportation service that includes at least one taxi. The taxi has a taxi trip meter system that utilizes GPS technology to determine the taxi's present location and calculates a fare for the customer based on a specified destination. Pomerantz discloses a GPS terminal 13 that operates as claimed. Pomerantz discloses that the taxi has a computer 10 that is fully capable of receiving destination and location information as claimed (see column 4, lines 17-20) and calculates an optimal route. Pomerantz discloses the finding of the optimal route (shortest distance/time) from the current location of the taxi to the destination location. Pomerantz discloses that a charge is calculated for the optimal route, the distance, etc. as claimed. Pomerantz does not disclose that the information is transmitted from the center equipment to the taxi and from the taxi to the center equipment. Smith discloses a taxi dispatching system that is highly automated and efficient. Smith discloses that a central server with associated databases communicates with a taxi fleet via wireless communication 22 to provide a dispatching/monitoring system. This is what the examiner considers to be the claimed center equipment. Smith discloses a server 10, an ITS system, communication means 22, and map storage means (col. 2, lines 1-5). It is considered inherent in Smith that fee data is stored so that a fare price can be calculated; otherwise a fare could not

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be calculated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the taxi system of Pomerantz with the dispatching system of Smith so that a highly automated and efficient system can be realized. This would then result in location information, etc.. being transmitted to the central dispatching location for processing and then the taxi would receive information from the center equipment. Instead of having each taxi's computer store the street information and calculate optimal routes, etc. the center equipment would perform the tasks. The system would operate as claimed.

For claim 40,45,60,62, Pomerantz discloses that the customer can be presented with advanced notice of the fare. This allows one to ensure that the customer has enough money to be able to pay. Not disclosed is the concept of having the customer pay the fare before the transportation is provided to the customer. It is old and well known in society that some dishonest taxi riders may try to avoid paying the fare and will "stiff" the driver by fleeing upon arrival at the destination, so having the customer pay up front is desirable. It is also considered obvious that a provider of a service wants to be paid up front to ensure they are getting their money prior to providing services. Airlines make you pay prior to transportation being provided. Cruise lines make you pay before providing transportation. A public bus requires payment prior to the transportation service being provided. It would have been obvious to one of ordinary skill in the art to have the customer pay the fare prior to the actual trip to ensure payment and to avoid an unscrupulous rider from taking off without paying.

Concerning claims 5-8,19,23,32,43,44,46,47,61,65,73,74, the system of Pomerantz (modified as set forth by the examiner) would operate as claimed if the event claimed were to happen. If a customer changes the destination in route, the system would necessarily operate as claimed (by obtaining new position location information, new destination location, optimal route, associated fare for the new trip, etc.).

For claims 64,66 if the customer chooses to continue with the taxi service after being given advance notice of the fare to the desired destination, the customer has chosen the optimal route. The customer will pay the fare indicated (scope includes at the end destination).

For claims 63,65 if a customer wants a taxi to take them uptown 1 block in Manhattan, the shortest distance and shortest driving time will be the same because the destination is very close, so this claim is satisfied by the combination set forth by the examiner. It is common that if it is raining out a customer may take a taxi for just one block to avoid getting wet (on the way to a business lunch for example), so when the system calculates an optimal route for shortest distance and time, the route information presented to the customer will be both for the shortest distance and time because they are the same.

For claims 26,27,67-70, the recited method steps will necessarily follow from the situation of a customer choosing a new destination during transportation to an original destination when the fare is paid in advance. If you already paid the fare for transportation from A to B, and midway at M you decide you want to go to C, since you already paid for the portion of the trip from M to B which is not going to take place, this

amount is credited back to the customer and applied to the new fare from midway to C. A taxi cannot charge the customer for services not rendered. The limitations of claim 66 are simply figuring out the fare for the actual legs of the trip that are taken.

For claims 30,71,72,74, the claimed limitations are reciting what GPS is and are satisfied by the combination set forth by the examiner. GPS operates by allowing one to view map data with current location and destination location information being graphically shown to the user. This is what GPS is. When traveling a specified route in a GPS system, the route is shown on the map so you know where to go.

4. Claims 9-17,20,21,24,25,28,29,31,33,35,37,48-58, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerantz (6122591) in view of Smith et al. (6430496) and further in view of Delorme ((5802492)).

For claims 9-12,20,24,35,37,48,49,51,52,58, Pomerantz discloses providing a transportation service that includes at least one taxi. The taxi has a taxi trip meter system that utilizes GPS technology to determine the taxi's present location and calculates a fare for the customer based on a specified destination. Pomerantz discloses a GPS terminal 13 that operates as claimed. Pomerantz discloses that the taxi has a computer 10 that is fully capable of receiving destination and location information as claimed (see column 4, lines 17-20) and calculates an optimal route. Pomerantz discloses the finding of the optimal route (shortest distance/time) from the current location of the taxi to the destination location. Pomerantz discloses that a charge is calculated for the optimal route, the distance, etc. as claimed. Pomerantz

does not disclose that the information is transmitted from the center equipment to the taxi and from the taxi to the center equipment. Pomerantz also does not disclose calculating more than one route and having the customer pay prior to the transportation service being provided. Smith discloses a taxi dispatching system that is highly automated and efficient. Smith discloses that a central server with associated databases communicates with a taxi fleet via wireless communication 22 to provide a dispatching/monitoring system. This is what the examiner considers to be the claimed center equipment. Smith discloses a server 10, an ITS system, communication means 22, and map storage means (col. 2, lines 1-5). It is considered inherent in Smith that fee data is stored so that a fare price can be calculated; otherwise a fare could not be calculated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the taxi system of Pomerantz with the dispatching system of Smith so that a highly automated and efficient system can be realized. This would then result in location information, etc., being transmitted to the central dispatching location for processing and then the taxi would receive information from the center equipment. Instead of having each taxi's computer store the street information and calculate optimal routes, etc. the center equipment would perform the tasks. The system would operate as claimed. Concerning the limitation of allowing the customer to choose from more than one calculated route, DeLorme discloses a travel planner that can calculate routes from an origination location to a destination location. DeLorme discloses in the Background of the invention section that some prior art route planning software calculates the shortest travel route, the quickest travel route, and a preferred

scenic route (for a tourist). This allows the user to choose which route they want to take depending on various factors like time, distance, scenic stops, etc. DeLorme also discloses in column 10, lines 46-47 that the system of the invention of DeLorme calculates the shortest travel route, the quickest travel route, or a route based on user preferences. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Pomerantz with the ability to calculate more than one route for presentation to the customer (shortest, quickest, most scenic, etc.) and to present the routes to the customer so that the customer can choose the route that best suits their needs.

Concerning claims 13-17,21,25,33,53,54,56,57, the system of Pomerantz (modified as set forth by the examiner) would operate as claimed if the event claimed where to happen. If a customer changes the destination in route, the system would necessarily operate as claimed (by obtaining new position location information, new destination location, optimal route, associated fare for the new trip, etc.).

For claims 50,55, if the customer chooses to continue with the taxi service after being given advance notice of the fare to the desired destination, the customer has chosen the optimal route. The customer will pay the fare indicated (scope includes at the end destination).

For claims 28,29, the recited method steps will necessarily follow from the situation of a customer choosing a new destination during transportation to an original destination when the fare is paid in advance. If you already paid the fare for transportation from A to B, and midway at M you decide you want to go to C, since you

already paid for the portion of the trip from M to B which is not going to take place, this amount is credited back to the customer and applied to the new fare from midway to C. A taxi cannot charge the customer for services not rendered. The limitations of claim 66 are simply figuring out the fare for the actual legs of the trip that are taken.

For claim 31, the claimed limitations are reciting what GPS is and are satisfied by the combination set forth by the examiner. GPS operates by allowing one to view map data with current location and destination location information being graphically shown to the user. This is what GPS is. When traveling a specified route in a GPS system, the route is shown on the map so you know where to go.

5. Claims 79-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerantz (6122591).

For claims 79,80,82, Pomerantz discloses the invention substantially as claimed. Pomerantz discloses that the customer can be presented with advanced notice of the fare. This allows one to ensure that the customer has enough money to be able to pay. Not disclosed is the concept of having the customer pay the fare before the transportation is provided to the customer. It is old and well known in society that some dishonest taxi riders may try to avoid paying the fare and will "stiff" the driver by fleeing upon arrival at the destination, so having the customer pay up front is desirable. It is also considered obvious that a provider of a service wants to be paid up front to ensure they are getting their money prior to providing services. Airlines make you pay prior to transportation being provided. Cruise lines make you pay before providing

transportation. A public bus requires payment prior to the transportation service being provided. It would have been obvious to one of ordinary skill in the art to have the customer pay the fare prior to the actual trip to ensure payment and to avoid an unscrupulous rider from taking off without paying.

For claim 81, the recited method steps will necessarily follow from the situation of a customer choosing a new destination during transportation to an original destination when the fare is paid in advance. If you already paid the fare for transportation from A to B, and midway at M you decide you want to go to C, if the fare from M to C is greater than what was already paid for from A to B, the customer will be asked to pay the difference.

6. Claims 83,84, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomerantz (6122591) in view of DeLorme et al. (5802492). Pomerantz discloses the invention substantially as claimed.

Pomerantz does not disclose allowing the customer to choose from more than one calculated route and having the customer pay prior to the transportation service being provided.

Concerning the limitation of paying prior to the transportation service being provided, Pomerantz discloses that the customer can be presented with advanced notice of the fare. This allows one to ensure that the customer has enough money to be able to pay. It is old and well known in society that some dishonest taxi riders may try to avoid paying the fare and will "stiff" the driver by fleeing upon arrival at the destination,

so having the customer pay up front is desirable. It is also considered obvious that a provider of a service wants to be paid up front to ensure they are getting their money prior to providing services. Airlines make you pay prior to transportation being provided. Cruise lines make you pay before providing transportation. A public bus requires payment prior to the transportation service being provided. It would have been obvious to one of ordinary skill in the art to have the customer pay the fare prior to the actual trip to ensure payment and to avoid an unscrupulous rider from taking off without paying.

Concerning the limitation of allowing the customer to choose from more than one calculated route, DeLorme discloses a travel planner that can calculate routes from an origination location to a destination location. DeLorme discloses in the Background of the invention section that some prior art route planning software calculates the shortest travel route, the quickest travel route, and a preferred scenic route (for a tourist). This allows the user to choose which route they want to take depending on various factors like time, distance, scenic stops, etc. DeLorme also discloses in column 10, lines 46-47 that the system of the invention of DeLorme calculates the shortest travel route, the quickest travel route, or a route based on user preferences. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Pomerantz with the ability to calculate more than one route for presentation to the customer (shortest, quickest, most scenic, etc.) and to present the routes to the customer so that the customer can choose the route that best suits their needs.

Response to Arguments

With respect to the comments on the IDS statements the examiner has the following comments.

With respect to the IDS of 5/9/01, the examiner notes applicant's clarification on the date of filing for the IDS.

With respect to the argument that the examiner cannot consider a reference in view of the statement of relevancy, the examiner disagrees. The non-English references are to be considered in view of the submitted statement of relevancy; otherwise why does the PTO require a statement of relevancy for the examiner to review? The examiner is only making the record clear as to how each IDS was considered. The examiner will not refrain from making any statement he deems important to the prosecution history so that others will know exactly what transpired and why on the record.

With respect to the argument that the English version of the foreign search report/office action does satisfy the requirement for a concise explanation of relevancy, the examiner never questioned whether or not the submission satisfied the concise explanation of relevancy. This seems to be what applicant's counsel is arguing. The examiner only stated that the references were considered in view of the statement of relevancy. Also, applicant's counsel has even admitted that the document of 6/19/03 only has "portions" in English, not the entire document. Where in the MPEP is it set forth that applicant is allowed to only submit portions of their choosing? The MPEP

requires an English version of *the document*, not just a portion. However, the examiner has initialed the 1449 of 6/19/03 in view of the statement of relevancy submitted by applicant and the references have been considered. The only 1449 being resent to applicant is the IDS of 6/19/03 as the other IDS statements were previously considered and already sent to applicant.

With respect to section IV(A) of the response relating to claims 1-78 overall, applicant has argued that the 103 rejection is improper for numerous reasons (Smith is non-analogous art, Pomerantz does not recognize the need for automation or efficiency, the 103 complicates Pomerantz by modifying it with Smith, and that one of ordinary skill in the taxi art would not look to a dispatching system such as Smith (not same field of endeavor). With respect to the arguments about Pomerantz not recognizing the need for further automation or modification as the examiner has done, this argument more or less is saying that if Pomerantz is not a 102 it cannot be used in a 103 rejection. A primary reference in a 103 rejection does not need to recognize or discuss a feature being provided by a secondary reference. If this was true, then there would be no need for 35 USC 103 and all rejections would be 35 USC 102. This argument is non-persuasive. The argument that Pomerantz would be more complicated is non-persuasive. The issue of obviousness is not whether or not something is made more complicated (like a car being modified to have ABS brakes, makes the car more complicated but is clearly an obvious modification) but is whether or not the difference is obvious. With respect to Smith and the statements made by applicant that "Smith does not in any way relate to a system for determining routes, applicant is referred to column

16, lines 56-65 as an example of Smith discussing "routes". Smith does exactly what applicant has stated is not taught. Smith derives routes for drivers and transmits the routes to the drivers so they know where they are supposed to go if in unfamiliar territory. Smith also expressly discloses the use of the system for taxis, contrary to the comment by applicant's counsel. Smith is analogous art and is properly used in the 103 rejection.

With respect to the arguments presented for claims 1-8,18,19,22,23,26,27,30,32, 34,36, the arguments are found to be non-persuasive. The statement made by applicant's counsel that Pomerantz does not determine a route until one arrives at their destination is simply incorrect. Pomerantz figures out a route and even allows for the customer to get an advance indication of how much it will cost to go from A to B. See column 4, lines 18-24. The route is not figured out only at the destination (end of trip) as has been argued. Additionally the 103 combination as set forth by the examiner does result in transmission of information from the center equipment as claimed.

Applicant should also take notice that arguing the manner of use of a system in article claims is not the same as if it were a method claim because in article claims the manner of use (intended use) will not render a claim patentable if the prior art has the same structure and is capable of the same intended use. Applicant should keep in mind that structure is what should be argued in article claims, not the manner of the intended use of the system. Concerning claim 5, the 103 combination is fully capable of doing what is claimed. Applicant has made some general comments that Pomerantz cannot do what is claimed in claim 5; however, no reasoning as to why has been provided. The prior art

if fully capable of doing what is claimed. Applicant seems to be arguing that once you start a journey from A to B, you must go to B before the system can accept a new destination, which is not true. Nothing in the prior art states this fact, and there is nothing to lead one to believe this is true, and applicant has provided no explanation to support the allegation. The arguments are found to be non-persuasive.

With respect to the arguments for claims 9-17,20,21,24,25,28,29,31,33,35,37, 48-58, they are deemed moot based on the new grounds of rejection. For claim 13, applicant is referred to the rebuttal for claim 5, which deals with the same limitations and argument made by applicant.

Concerning the arguments for claims 38-47, they are found non-persuasive. Applicant has argued that the rejection is improper because Pomerantz does not disclose transmitting destination information specified by a customer. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Additionally, this was specifically addressed in the 103 rejection by the examiner and is a result of the modification set forth by the examiner (see office action: **"This would then result in location information, etc.. being transmitted to the central dispatching location for processing and then the taxi would receive information from the center equipment. Instead of having each taxi's computer store the street information and calculate optimal routes, etc. the center equipment would perform the tasks."**

The system would operate as claimed. “). The comments concerning 17th avenue and Pennsylvania Avenue are noted but not seen as relevant to the claimed invention as the claims mention nothing about security and DC streets. Applicant has simply made up a hypothetic situation to suit their arguments, which is found to be non-persuasive. With respect to the comment that Pomerantz does not allow for calculating fares only after arriving at a destination, then why does Pomerantz disclose in column 4, lines 18-24 that the fare can be calculated in advance by entering the starting and ending points? Pomerantz discloses advance notification of a fare before the trip has begun, contrary to the argument set forth by applicant. The 103 is deemed proper and the arguments are non-persuasive.

For claims 59-78, the argument is found to be non-persuasive. Applicant has argued that Pomerantz does not disclose the finding of more than one route as claim 59 and 63 recite. Pomerantz discloses the finding of an optimal route, which is the route with the shortest distance (also shortest time). For the system to be able to determine an optimal route, the system necessarily must compute multiple routes to compare with each other. If you only figure out one route, how would you know whether or not that is the optimal route with the shortest distance? The prior art discloses what is claimed contrary to the argument.

Concerning claims 79-82, Pomerantz discloses that “the starting and ends points may be inputted before the trip to provide advance notice of the fare”. See column 4, lines 18-24. Applicant’s argument is non-persuasive because it is based on factually incorrect statements. Pomerantz clearly discloses what applicant has stated is not

disclosed. The examiner does not know what else to say other than to refer applicant to this portion of Pomerantz.

With respect to claims 83,84, applicant has stated that the claims are patentable for the reasons set forth for claims 79-82. The argument is non-persuasive for the same reasons that the argument for claims 79-82 are non-persuasive. The examiner considers applicant's silence with respect to Delorme and what he discloses to be applicant's agreement that Delorme discloses what the examiner has stated. Since Pomerantz does disclose what applicant argued is not disclosed, the rest of the rejection and the use Delorme as a secondary reference is deemed proper.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 703-308-2262. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703-308-2702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DENNIS RUHL
PRIMARY EXAMINER